What is claimed is:

1. A fluorine gas generator for generating fluorine gas by electrolyzing an electrolytic bath comprising a hydrogen fluoride-containing mixed molten salt which generator is equipped with:

a hydrogen fluoride gas feed line for feeding hydrogen fluoride gas into the electrolytic bath,

a first automatic valve disposed on said hydrogen fluoride gas feed line and capable of being closed on the occasion of interruption of hydrogen fluoride gas feeding, and

an inert gas substitution means for eliminating the hydrogen fluoride gas remaining in said line on the side downstream from said first automatic valve on said hydrogen fluoride gas feed line and substituting an inert gas therefor on the occasion of interruption of hydrogen fluoride gas feeding.

2. The fluorine gas generator according to Claim 1, wherein said inert gas substitution means comprises

a detecting means for detecting interruption of feeding of the hydrogen fluoride gas,

an inert gas feed line for feeding the inert gas to said hydrogen fluoride gas feed line on the side downstream from said first automatic valve, and

a second automatic valve disposed on said inert gas feed line and operated in association with said detecting means to feed the inert gas into said line on the side downstream from said first automatic valve on said hydrogen fluoride gas feed line.

3. The fluorine gas generator according to Claim 1 or 2, wherein said inert gas feed line is provided with an inert gas storage tank for storing the inert gas to be fed.

4. A fluorine gas generator for generating fluorine gas by electrolyzing an electrolytic bath comprising a hydrogen fluoride-containing mixed molten salt which generator is equipped with:

a hydrogen fluoride gas feed line for feeding hydrogen fluoride gas into the electrolytic bath,

a first automatic valve disposed on said hydrogen fluoride gas feed line and capable of being closed on the occasion of interruption of hydrogen fluoride gas feeding, and

an inert gas substitution means for eliminating the hydrogen fluoride

gas remaining in said line on the side downstream from said first automatic valve on said hydrogen fluoride gas feed line and substituting an inert gas therefor in case of emergency in the fluorine gas generator.

5. The fluorine gas generator according to Claim 4, wherein said inert gas feed line is provided with an inert gas storage tank for storing the inert gas to be fed.